

FIFTH PATHWAY PROGRAMS IN AMERICAN MEDICAL SCHOOLS

BARRY STIMMEL, M.D.

Office of Academic Affairs
Mount Sinai School of Medicine of The City University of New York

LEONARD A. KATZ, M.D.

Associate Dean
State University of New York
Buffalo, New York

EDWARD BROWNSTEIN, M.D.

Department of Psychiatry
The New York Medical College
Valhalla, New York

ARTHUR M. OSTEEN, Ph.D.

Assistant Director
Department of Physicians' Credentials and Qualifications
The American Medical Association
Chicago, Illinois

HARRY SMITH, Ph.D.

Chairman, Department of Biostatistics
Mount Sinai School of Medicine of The City University of New York
New York, New York

IN June 1971 the Council on Medical Education of the American Medical Association (AMA) published a policy statement recognizing the development of a program that has become known as the Fifth Pathway.¹ This program, initially geared specifically for American citizens studying medicine in Mexico, permitted a year of clinical training under the supervision of an American medical school to be used in lieu of an additional year or more of training after finishing four years of the formal curriculum in Mexico prior to being awarded the medical degree. Successful completion of this year allows entry into graduate training programs either through individual negotiations with program directors or the National Resident Matching Program. Participation allows a student the possibility of obtaining graduate training in the United States without

certification from the Educational Commission for Foreign Medical Graduates (ECFMG), passing the VISA qualifying examination, or even possessing a medical degree.

Although more than eight years have passed since the AMA policy statement, there seems to be considerable controversy in the American medical educational system as to the value of this program. The Association of American Medical Colleges, specifically, has not only refrained from supporting this program but has expressed concern over the quality of this educational effort. Nonetheless, it is apparent that a large number of students are enrolled in medical schools in Mexico, by a recent estimate exceeding 4,000.² The current restriction imposed upon foreign nationals means that these students play an increasingly prominent role in health care in the United States. Fifth Pathway programs are also beginning to be utilized by American students graduating from other foreign medical schools to obtain the year of supervised clinical training required for Educational Commission for Foreign Medical Graduates certification. This paper attempts to define the status of Fifth Pathway programs through June 1978 and to assess the performance of a cohort of those students on the Federation of State Medical Boards of the United States Licensing Examination (FLEX) to develop a meaningful picture of Fifth Pathway programs with respect to the impact that these physicians might have on the future provision of health care.

METHODS

Our data are derived from three main sources. The first represents aggregate data obtained from the Division of Educational Policy and Development of the A.M.A., based on the response of medical schools to the annual Liaison Committee on Medical Education questionnaire. Data with respect to curriculum and career choice represent information obtained from Dr. Edward N. Brandt, vice chancellor for Health Affairs of the University of Texas System, through a questionnaire survey of Fifth Pathway programs in the United States. Specific data concerning medical schools in New York State were provided through the auspices of the Associated Medical Schools of New York State. Data retrieval was complete with respect to the Liaison Committee on Medical Education questionnaire and the cohort of students enrolled in member institutions of the Associated Medical Schools. The University of Texas survey received information from 95% of schools sponsoring Fifth Pathway programs.

TABLE I. APPLICATION, ADMISSION, AND ENROLLMENT

| <i>Year</i> | <i>Applications*</i> | <i>Acceptances</i> | <i>Nationwide</i> | <i>Enrollment</i> | | <i>New Jersey</i> | |
|-------------|----------------------|--------------------|-------------------|-------------------|------|-------------------|------|
| | | | | <i>New York</i> | | | |
| | No. | No. | No. | No. | (%)† | No. | (%)† |
| 1971-1972 | 0 | 8 | 8 | — | — | — | — |
| 1972-1973 | 220 | 61 | 61 | — | — | — | — |
| 1973-1974 | 195 | 125 | 124 | — | — | — | — |
| 1974-1975 | 256 | 194 | 194 | — | — | — | — |
| 1975-1976 | 759 | 291 | 275 | 154 | (52) | 85 | (31) |
| 1976-1977 | 1,334 | 375 | 363 | 181 | (49) | 96 | (26) |
| 1977-1978 | 2,398 | 626 | 473 | 210 | (44) | 92 | (19) |
| Totals | | 1,680 | 1,498 | 545 | (49) | 273 | (25) |

*These figures may not represent individual applicants.

†% of total for each year recorded and total recorded years.

—=data unavailable..

TABLE II. RANGE OF TUITION*

| <i>Amount</i> | <i>No.</i> | <i>(%)</i> |
|---------------|------------|------------|
| None | 6 | (15) |
| <1,000 | 5 | (12) |
| 1,001-2,000 | 4 | (10) |
| 2,001-3,000 | 5 | (12) |
| 3,001-4,000 | 2 | (5) |
| 4,001-5,000 | 8 | (19) |
| 5,001-6,000 | 4 | (10) |
| 10,000 | 1 | (2) |
| No response | 6 | (15) |
| Total | 41 | |

*93% pay directly to medical school

RESULTS

As of June 1978, 41 (34%) of the 121 American medical schools sponsored Fifth Pathway programs, enrolling one or more students in the year of supervised clinical training. Since the initiation of this program in 1971, a total of 1,498 students have been enrolled, with the enrollment progressively increasing from 1974 to 1978 (Table I). Schools in the Northeast are especially prominent, and 63% of all students enrolled in Fifth Pathway programs during the 1977-78 year were in New York or New Jersey.

Consistent with A.M.A. guidelines for Fifth Pathway programs, a screening examination is utilized by almost all of the schools sponsoring them. Eighty-nine percent of all participating schools utilized the Educa-

TABLE III. ABILITY TO OBTAIN ACCREDITED GRADUATE TRAINING

| <i>Year</i> | <i>Completion of training</i> | <i>Accredited graduate training</i> | |
|-------------|-----------------------------------|---|------------|
| | | <i>No.</i> | <i>(%)</i> |
| 1972-1973 | 59 | 30 | (51) |
| 1973-1974 | 121 | 114 | (94) |
| 1974-1975 | 190 | 174 | (92) |
| 1975-1976 | 262 | 256 | (98) |
| 1976-1977* | NA | NA | NA |
| 1977-1978 | 396 | 380 | (96) |
| Totals | 1,348 | 1,299 | (96) |

*Data reporting for this year was incomplete.

tional Commission for Foreign Medical Graduate examination, either alone or in combination with the National Board Part I or Part II examinations. It is uncertain, however, whether a passing grade on this examination is required as a prerequisite for eligibility.

Tuition charges vary considerably with each individual medical school, and range from a tuition-free year to \$10,000 (Table II). Fifty-five percent of schools charge a tuition equal to or higher than that charged to their own students, and seven of the eight participating New York State schools fall into this pattern.

The curriculum content of the programs was identical or similar to that of the third year of medical school in 27 out of 39 responding schools. Twenty-nine of 39 responding schools (74%) utilize the primary teaching hospital for all or a part of the program. In 11 (28%) the program was conducted only at the primary hospital. At the conclusion of the clinical year of supervision, an examination to assess knowledge gained is given by 36 of the participating schools. A standardized examination, such as the Educational Commission for Foreign Medical Graduates or National Board examinations, was used in only 16 (33%), and most schools used their own standards for assessment.

Graduate training in accredited residency programs has been obtained by 96% of students completing their training (Table III). Approximately half of the students nationwide enter primary care specialties (Table IV).

An assessment of skills and knowledge of Fifth Pathway students when in graduate training, provided by the Liaison Committee on Medical Education questionnaire, on the basis of a comparison between graduates of American medical schools, reveals that 44% of the students were

TABLE IV. CAREER CHOICE OF FIFTH PATHWAY STUDENTS*

| 1972-1978 | | |
|--------------|------------|------------|
| | <i>No.</i> | <i>(%)</i> |
| Primary care | 353 | (54) |
| Specialty | 246 | (37) |
| Other | 59 | (9) |
| Total | 658 | (100) |

*Data from survey by E.N. Brandt, M.D., University of Texas, Austin, based on 95% response of participating schools.

TABLE V. CUMULATIVE PERFORMANCE OF NEW YORK STATE FIFTH PATHWAY CLASSES OF 1976-1978 ON THE FLEX—1976 THROUGH 1979

| <i>Class</i> | <i>Total no. in cohort</i> | <i>First time takers</i> | | <i>Repeaters</i> | | <i>Students still without licensure</i> | |
|--------------|--------------------------------|------------------------------|---------------------|------------------|---------------------|---|------------|
| | | <i>No.</i> | <i>Pass (%)</i> | <i>No.</i> | <i>Pass (%)</i> | <i>No.</i> | <i>(%)</i> |
| 1976 | 154 | 132 | (69) | 31 | (48) | 50 | (32) |
| 1977 | 181 | 163 | (66) | 29 | (38) | 62 | (34) |
| 1978 | 210 | 158 | (73) | 25 | (36) | 86 | (41) |
| Totals | 545 | 453 | (69) | 85 | (41) | 198 | (36) |

considered to perform less well than American medical students. Objective data with respect to ability to pass state licensure examinations of students completing Fifth Pathway programs in New York State (Table V) reveal that the first-time-taker pass rate of students on this examination (69%) is significantly less than that of American and Canadian medical school graduates ($p < 0.001$).³ The pass rate of Fifth Pathway students, however, is higher than that of other foreign medical graduates, who average a 56% pass rate in these examinations.³

Follow-up data with respect to passing the FLEX by those students completing Fifth Pathway programs in 1976, 1977, and 1978 in New York State medical schools (Table V) reveal that, as of June 1979, 198 of 545 students (36%) in these cohorts have been either unable to pass the FLEX on repeated testing or have not yet taken this examination.

DISCUSSION

Enrollment of students in Fifth Pathway programs has progressively increased over the past several years, with the number of participating American medical schools increased from 31 to 41 (33%) between 1977

and 1978. Regardless of acceptance by the Association of American Medical Colleges, the Fifth Pathway has been an important source of physician supply, the output of students in 1978 approximating the graduating classes of more than three American medical schools. These students are beginning to play a considerable role in health care services. Schools in New York and New Jersey are especially prominent with respect to Fifth Pathway programs; 49% of all students enrolled from 1971 to 1978 attended programs in New York State and 25% attended programs in New Jersey.

Subjective assessment of these students' skills during residency training has been favorable,^{4,5} an observation tempered by the fact that these students usually compete for programs of low acceptability to graduates of American medical schools, making peer comparison difficult.^{6,7} Objective data from FLEX results indicate that performance of Fifth Pathway students is inferior to that of students who have graduated from American and Canadian medical schools.³ This actual difference in performance is probably even greater than suggested because many American graduates who take the FLEX are students who have had trouble passing the National Board examinations. Their performance, however, is considerably better than that of other foreign medical graduates, and reflects the value of the additional year of supervised clinical training. More recent data from the Associated Medical Schools' cohort suggest an improvement in performance of these students. In the cohort of 223 students completing Fifth Pathway programs in New York State in 1979, 136 of 156 students (87%) passed the FLEX.

Of considerable concern is the number of students who have either been unable to pass or have not yet taken this examination. Thirty-six percent of the 545 students in the New York State cohorts completing Fifth Pathway programs from 1976 through 1978 are not yet licensed to practice medicine. This is most disturbing with respect to the class of 1976, which has already completed three years of residency training. Fifty (32%) of the 154 students are still unable to engage in independent practice. The fate of these students remains unknown, but it is not unlikely that they will work as unlicensed physicians in the "medical underground" described by Weiss et al.⁸

Attrition rates can be estimated based on initial failure to pass the Educational Commission for Foreign Medical Graduates examination as well as the performance of the New York State cohorts on the FLEX. When applied to an estimate of American citizens in foreign medical

schools,² a projection can be made with respect to the number of these students who will be able to enter our health care system. Assuming an annual enrollment of 3,000 final year American citizens with an average pass rate on the ECFMG examinations in 1977 and 1978 of 33%-35% and on the FLEX of 59%-69%, only 584 to 714 students will ultimately be able to obtain state licenses. This estimate may be considered conservative because it does not take into account the attrition rate in foreign medical schools, the increasing number of students enrolled in Caribbean medical schools, which have as low as a 5% pass rate on the ECFMG examination, or the poor performance of foreign medical graduates on the FLEX who have not participated in Fifth Pathway programs. It is conceivable, with respect to individual medical schools, that less than 10% of their graduates will ever enter the practice of medicine.

Fifth Pathway programs are a means to upgrade skills of American citizens enrolled in foreign medical schools. The actual numbers enrolled are probably sufficient to make up for the decreasing entry of foreign nationals were attrition to be minimal. Programs that enable these students to upgrade their skills should be encouraged because students who successfully complete this training and pass state licensure examinations will be important contributors to the provision of health care.

CONCLUSIONS

The data presented suggest that Fifth Pathway programs have been able to accomplish their objectives with respect to upgrading the skills of participating students and, therefore, should be supported and encouraged. The proportion of students, however, who have not achieved the necessary prerequisite knowledge to enter these programs is considerable and, unfortunately, may be increasing as enrollment in Caribbean medical schools expands. A realistic appraisal of chances to reenter the American educational system should be provided to prospective students considering enrollment in these schools.

Availability of Educational Commission for Foreign Medical Graduates data concerning the pass rates by schools would be a start toward this objective. A concerted effort by the Association of American Medical Colleges, the A.M.A., and the Liaison Committee on Medical Education to develop a better mechanism to monitor and to evaluate the quality of existing educational programs at foreign medical schools would also help to define the role of these students in our health care system.

SUMMARY

Restrictions imposed on the entry of foreign nationals to the American health care system means that American citizens enrolled in foreign medical schools play an increasing role in physician supply. Fifth Pathway programs represent a major effort to facilitate the entry of these students into the medical educational system, and enrolled 1,498 students over the past seven years, with 473 students completing these programs in 1978. Fifth Pathway programs have been able to improve the skills of participants as compared to students in foreign medical schools who do not take Fifth Pathway programs when measured by pass rates on state licensure examinations. Such programs, which provide good educational experience, will play a prominent role in training the enlarging number of American citizens enrolled in Mexican medical schools.

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